

Appl. No. 09/618,188

IN THE CLAIMS

1. (Currently Amended) A receiver for receiving data frames transmitted through a communication channel and comprising an error correction device for correcting transmission errors in the received data, wherein said error correction device comprises:

 [[-]] storage means for storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language, the predetermined set of speech elements being different than the data in the received data frames,

 [[-]] vocal recognition means configured to use the information associated with the predetermined set of speech elements to recognize corresponding speech elements in the received data frames,

 [[-]] detection means for detecting corrupted parts in the recognized speech elements,

 [[-]] synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and

 [[-]] replacement means for replacing said corrupted parts by synthesized parts in the received data frames.

2. (Currently Amended) A The receiver as claimed in claim 1, wherein said speech elements are phonemes or diphones.

3. (Cancelled)

Appl. No. 09/618,188

4. (Currently Amended) ~~Telephone equipment comprising a~~ **The receiver as claimed in claim 1, wherein the receiver is incorporated in telephone equipment.**

5. (Currently Amended) An error correction device for correcting transmission errors in received digital data frames, comprising:

[[-]] storage means for storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language, the predetermined set of speech elements being different that the data in the received data frames,

[[-]] vocal recognition means configured to use the information associated with the predetermined set of speech elements to recognize corresponding speech elements in the received data frames,

[[-]] detecting means for detecting corrupted parts in the recognized speech elements,

[[-]] synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and

[[-]] replacement means for replacing said corrupted parts by the synthesized parts in the received data frames.

6. (Currently Amended) A communication system for transmitting data frames between a transmitter and a receiver via a communication channel, the receiver comprising an error correction device for correcting transmission errors in the received data, wherein said error correction device comprises:

[[-]] storage means for storing information associated with a predetermined

Appl. No. 09/618,188

set of speech elements that are suitable for reconstituting words of a vocal language, the predetermined set of speech elements being different than the data in the received data frames,

[[I-]] vocal recognition means configured to use the information associated with the predetermined set of speech elements to recognize corresponding speech elements in the received data frames,

[[I-]] detecting means for detecting corrupted parts in the recognized speech elements,

[[I-]] synthesis means configured to use the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and

[[I-]] replacement means for replacing said corrupted parts by the synthesized parts in the received data frames.

7. (Currently Amended) An error detection method for correcting transmission errors in received digital data frames, comprising ~~the following steps~~:

[[I-]] ~~a storage step for~~ storing information associated with a predetermined set of speech elements that are suitable for reconstituting words of a vocal language, the predetermined set of speech elements being different than the data in the received data frames,

[[I-]] ~~a vocal recognition step for~~ using the information associated with the predetermined set of speech elements to permanently recognize corresponding speech elements in the received data frames,

[[I-]] ~~a detection step for~~ detecting corrupted parts in the received speech elements,

Appl. No. 09/618,188

[[1]] ~~a synthesis step for~~ using the information associated with the predetermined set of speech elements to synthesize parts of the recognized speech elements corresponding to the corrupted parts, and

[[1]] ~~a replacement step for~~ replacing said corrupted parts by the synthesized parts in the data frame.

8. (Currently Amended) ~~An~~ The error correction device as claimed in claim 5, wherein said speech elements are phonemes or diphones.

9. (Currently Amended) ~~A~~ The communication system as claimed in claim 6, wherein said speech elements are phonemes or diphones.

10. (Currently Amended) ~~An~~ The error correction method as claimed in claim 7, wherein said speech elements are phonemes or diphones.

11. (New) The receiver of Claim 1, wherein the predetermined set of speech elements comprise a dictionary; and wherein the vocal recognition means is operable to provide a probability of recognizing a received element among the elements of the dictionary.

12. (New) The error correction device of Claim 5, wherein the predetermined set of speech elements comprise a dictionary; and wherein the vocal recognition means is operable to provide a probability of recognizing a received element among the elements of the dictionary.

Appl. No. 09/618,188

13. (New) The communication system of Claim 6, wherein the predetermined set of speech elements comprise a dictionary; and wherein the vocal recognition means is operable to provide a probability of recognizing a received element among the elements of the dictionary.

14. (New) The method of Claim 7, wherein the predetermined set of speech elements comprise a dictionary; and further comprising providing a probability of recognizing a received element among the elements of the dictionary.

15. (New) The method of Claim 14, further comprising determining, based at least in part on the probability of recognizing the received element among the elements of the dictionary, whether to replace the received element.